Extending NASA Earth Science Data Use to the K-12 and Citizen Scientist Communities

The goal of NASA's Earth Science Enterprise (ESE) is to stimulate public interest in the understanding of Earth system science and to encourage young scholars to consider careers in science and technology. As part of this effort under REASoN - the Research, Education and Applications Solutions Network - we will develop "microsets" of NASA ESE data which are both accessible to and of interest to the K-12 and citizen scientist communities. Exposure to such data and the ability to analyze these data could be helpful in developing skills in science, math, chemistry, geography and computer technology.
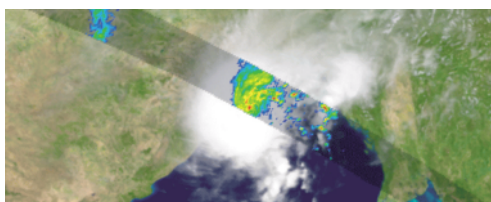
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For More Information, Visit our Web Site at
http://reason.larc.nasa.gov

Earth Science Data Microsets

The Atmospheric Sciences Data Center at NASA Langley Research Center houses numerous atmospheric science data sets. Beginning with Clouds and the Earth's Radiant Energy System (CERES) data, we will extract easy-to-understand parameters such as cloud area fraction, cloud height and cloud temperature. Such data could also be geolocated with student ground observations from both the GLOBE and S'COOL projects. Thus, students would have the ability to learn simple analysis skills of comparing satellite versus in-situ data in addition to learning about the natural processes of the atmosphere which influence Earth's energy budget.

NASA Portal Web Interface

The NASA Portal is an entry point for public access to NASA resources. We plan to utilize this web interface for better visibility and navigation to our products and services.

Open Source Component

At this web interface, we also plan an "open source" component, a common gateway interface where teachers and citizen scientists could publicly contribute lesson plans or computer programs which could complement the microsets of data provided. Feedback and suggestions would also be welcomed in this area of the web site, keeping us in touch with our users needs and successes.

Mentor Network

Lastly, we plan to introduce a mentor network, one in which teachers and local citizen scientists might connect to benefit and maximize student initiative.

National Aeronautics and Space Administration

ATMOSPHERIC SCIENCES DATA CENTER

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